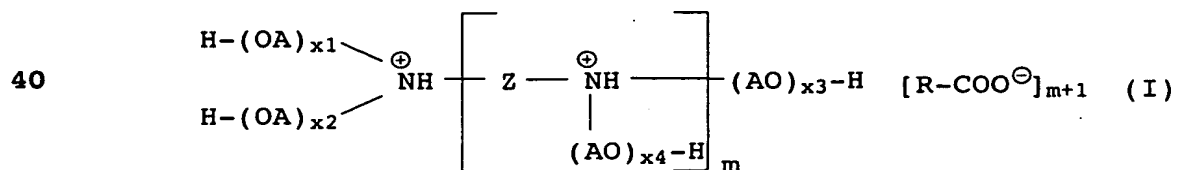


We claim:

- 5 1. An additive mixture comprising
- 10 i) as component A, at least one additive having a detergent action which has at least one hydrophobic hydrocarbon radical having a number average molecular weight (M_n) of from 85 to 20000 and at least one polar terminal group,
- 15 ii) as component B, at least one partially or completely neutralized fatty acid.
2. An additive mixture as claimed in claim 1, wherein the polar terminal group of component A is selected from
- 20 (a) mono- or polyamino groups having up to 6 nitrogen atoms where at least one nitrogen atom has basic properties,
- 25 (b) nitro groups, optionally in combination with hydroxyl groups,
- 30 (c) hydroxyl groups in combination with mono- or polyamino groups where at least one nitrogen atom has basic properties,
- 35 (d) polyoxy- C_2 - C_4 -alkylene groups which are terminated by hydroxyl groups, mono- or polyamino groups where at least one nitrogen atom has basic properties, or by carbamate groups,
- 40 (e) carboxylic ester groups,
- 45 (f) groups formed by Mannich reaction of substituted phenols with aldehydes and mono- or polyamines and
- (g) groups which are derived from carboxylic anhydrides and have hydroxyl and/or amino and/or amido and/or imido groups.

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3. An additive mixture as claimed in claim 2, wherein component A is an acylated nitrogen compound which burns ashlessly.
4. An additive mixture as claimed in any of the preceding claims, wherein the hydrocarbon radical is a homo- or copolymer radical whose repeating units are derived from monomers which are selected from propene, n-butene and isobutene and mixtures thereof.
5. An additive mixture as claimed in any of the preceding claims, wherein component A is obtainable by the reaction of a carboxylic acid or of a carboxylic acid derivative with an amine which has at least one NH group.
6. An additive mixture as claimed in claim 5, wherein the carboxylic acid or carboxylic acid derivative is a dicarboxylic acid or a dicarboxylic acid derivative.
7. An additive mixture as claimed in claim 6, wherein the carboxylic acid or carboxylic acid derivative is a polyalkenylsuccinic acid or a polyalkenylsuccinic acid derivative.
8. An additive mixture as claimed in claim 7, wherein component A comprises at least one polyalkenylsuccinimide.
9. An additive mixture as claimed in any of the preceding claims, wherein the hydrocarbon radical is derived from reactive polyisobutene.
10. An additive mixture as claimed in any of the preceding claims, wherein the fatty acid in component B is neutralized by at least one amine.
11. An additive mixture as claimed in claim 10, wherein component B comprises at least one fatty acid salt of the formula I



where

- R is C₇-C₂₃-alkyl or a mono- or polyunsaturated C₇-C₂₃-alkenyl, each of which may optionally be substituted by one or more hydroxyl groups;
- 5 A is C₂-C₈-alkylene;
- Z is C₁-C₈-alkylene, C₃-C₈-cycloalkylene, C₆-C₁₂-arylene or C₇-C₂₀-arylalkylene;
- 10 m is a number from 0 to 5; and
- x¹, x², x³ and x⁴ are each independently a number from 0 to 24, where at least one x is not 0,
- 15 and optionally at least one further fatty acid RCOOH, where R is as defined above.
12. An additive mixture as claimed in any of the preceding claims, wherein component A and component B are present in a
20 molar ratio of from 1:10 to 10:1.
13. The use of an additive mixture as defined in any of the preceding claims for additizing fuel and lubricant compositions.
- 25 14. The use as claimed in claim 13 for reducing carbon deposits caused by burning in the region of the injection system of diesel engines with and without direct fuel injection.
- 30 15. The use as claimed in claim 13 for reducing the corrosive action of a fuel.
16. A fuel composition comprising a majority of a hydrocarbon fuel and an effective amount of an additive mixture as
35 defined in any of claims 1 to 12 and optionally at least one further additive.
17. A fuel composition as claimed in claim 16 or the use as claimed in any of claims 13 to 15, wherein the fuel is diesel
40 fuel, heating oil or kerosene.
18. A fuel composition or the use as claimed in claim 17, wherein the diesel fuel is obtainable by refining, carbon gasification or gas liquefaction, or is a mixture of such
45 fuels, and optionally mixed with renewable fuels.

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19. A lubricant composition comprising an effective amount of an additive mixture as defined in any of claims 1 to 12 and a lubricant, and also optionally at least one further additive.

5 20. An additive concentrate comprising an additive mixture as defined in any of claims 1 to 12 and at least one diluent, and also optionally at least one further additive.

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